

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2005/000360

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H01L 33/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L H01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and application for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

e-KIPASS: "barrier", "quantum well" "GaN"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/0179923 A1 (DAISUKE MORITA et.al.) 5 DECEMBER 2002 see the abstract, figures 5, 6, 7, 19, 20 paragraphs [0061] - [0070]	1 - 4
A	KR 2001-0077971 A (SAMSUNG ELECTRO-MECHANIC CO., LTD.) 20 AUGUST 2001 see the abstract, claim 1, figures 3, 4	1 - 4
A	JP 2001-36134 A (ARIMA OPTOELECTRICS CORPORATION) 9 FEBRUARY 2001 see the full text	1 - 4
A	JP 11-74622 A (TOSHIBA CORPORATION) 16 MARCH 1999 see the full text	1 - 4
P, A	KR 2004-0047132 A (OPTRONIX INCORPERATION) 5 JUNE 2004 see the abstract, figure 3	1 - 4

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

16 JUNE 2005 (16.06.2005)

Date of mailing of the international search report

17 JUNE 2005 (17.06.2005)

Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2005/000360

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002/0179923 A1	05.12.2002	US 6738175 B AU 200117367 B2 AU 772491 B2 CA 2394460 A1 CN 1176500 C CN 1409875 A EP 1248303 A1 HK 1054467 A1 JP 13237457 A KR 1020020080345 A WO 0143206 A1	18.05.2004 18.06.2001 29.04.2004 14.06.2001 17.11.2004 09.04.2003 09.10.2002 08.04.2005 31.08.2001 23.10.2002 14.06.2001
KR 2001-0077971 A	20.08.2001	NONE	
JP 2001-36134 A	09.02.2001	CN 1277461 A GB 200014293 A0 GB 2352329 A GB 2352329 B2 JP 13036134 A JP 3636970 B US 6455870	20.12.2000 02.08.2000 24.01.2001 04.07.2001 09.02.2001 06.04.2005 24.09.2002
JP 11-74622 A	16.03.1999	NONE	
KR 2004-0047132 A	05.06.2004	NONE	